

REMARKS

Claims 1-15 are pending in the application prior to entering this amendment.

The examiner rejects claims 1-15 under 35 U.S.C. § 102(e) as being anticipated by Chinthammit et al (U.S. 6,867,753).

The applicants amend claims 1 and 5.

The application remains with claims 1-15 after entering this amendment.

The applicants add no new matter and request reconsideration.

Claims Rejections Under § 102(e)

The examiner alleges Chinthammit renders old claims 1-15. The applicants disagree for the reasons that follow.

The examiner alleges Chinthammit's imaging system 30 is "able to utilize its tracking system to distort or provide a more accurate image based upon 'a real world background.'" Office Action 6/15/2005, page 3. It seems evident that the examiner equates distorting as recited with registering or locating an image on "a real world background."

Chinthammit discloses a system in which "a virtual image is *registered* among a perceived real world background." Chinthammit Abstract. That is, Chinthammit identifies the temporal location of the detector to a sub-pixel/sub-line precision by "determining the location independently from the temporal resolution of the augmented imaging system." *Id.* "The augmented image is *registered* either to a 3D real world spatial coordinate system or to a time domain coordinate system based upon tracked position and orientation of the user." *Id.* Put differently, Chinthammit discloses an imaging system in which an augmented image, e.g., an ultrasound image, is *registered*, located, or otherwise positioned over a real image, e.g., the patient during a needle biopsy. "As another example, in a flight application, information related to aircraft systems (such as navigation way points) are superimposed and registered through a see through display over the real world scene as viewed through the augmented display." Chinthammit, column 2, lines 51-64. The advantage to a system like Chinthammit is that it enhances "human interaction with the real world using computer-generated information that is related to real world objects."

Claim 1 recites a controller... to predistort image data ... such that the predistorted image data projects an undistorted projected image on a projection surface. Claim 5 recites predistortion means for predistorting image data ... such that the predistorted image data projects an undistorted projected image on a projection surface. Claim 10 recites

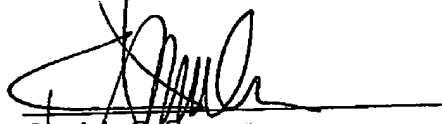
predistorting image data ... such that the predistorted image data projects an undistorted projected image on a projection surface. Unlike in Chinthammit where the augmented image (e.g., ultrasound image or navigation way points) is "stabilized, i.e., registered" on the real world background, the claims recite a system in which the actual image data is changed, i.e., predistorted, to accomplish the goal of preventing keystone distortion when projected on a screen. Chinthammit, column 3, line 7. Simply put, Chinthammit "determines the user's viewpoint so that the augmenting virtual image is always aligned relative to the real object." The claims, on the other hand, describe a system that predistorts (by e.g., vertically and horizontally scaling) image data such that the predistorted image data projects undistorted on a projection surface.

CONCLUSION

The applicants request reconsideration and allowance of all claims. The applicants encourage the Examiner to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

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Respectfully submitted,
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